

**Amendments to the Claims**

1. *(Original)* Apparatus for simultaneous transmission of at least a first signal and a second signal, each one of said signals comprising a data sequence and a training sequence characterized in that said apparatus is arranged to simultaneously transmit a training sequence of said first signal and a data sequence of said second signal.
2. *(Original)* Apparatus according to claim 1, characterized in that said apparatus is arranged to minimize a correlation between said training sequence of said first signal and said data sequence of said second signal.
3. *(Original)* Apparatus according to claim 2, characterized in that said apparatus is being arranged to repeatedly minimize said correlation.
4. *(Original)* Apparatus according to claim 2, characterized in that said apparatus is arranged to minimize said correlation by selecting said training sequence from a group of possible training sequences, said selected training sequence being arranged to have minimal correlation with said data sequence.
5. *(Original)* Apparatus according to claim 2, characterized in that said apparatus is arranged to minimize said correlation by interleaving said data sequence.
6. *(Original)* Apparatus according to claim 2, characterized in that said apparatus is arranged to minimize said correlation by modulating said training sequence with a first modulation and to modulate said data sequence with a second modulation.
7. *(Currently Amended)* Module for use in an apparatus ~~as claimed in claims 2,3,4,5 or 6~~ as claimed in claim 2 wherein said module is arranged to minimize a correlation between a training sequence of a first signal and a data sequence of a second signal.

8. (*Currently Amended*) Simultaneous signals for transmission by an apparatus ~~as claimed in claims 1, 2, 3, 4, 5 or 6~~ as claimed in claim 1,

\_\_\_\_\_ said simultaneous signals comprising at least a first signal and a second signal,  
\_\_\_\_\_ said first signal and said second signal comprising a data sequence and a training sequence wherein, a trainings sequence of said first signal and a data sequence of said second signal are arranged to be simultaneously transmitted.

9. (*New*) Simultaneous signals for transmission by an apparatus as claimed in claim 2,  
said simultaneous signals comprising at least a first signal and a second signal,  
said first signal and said second signal comprising a data sequence and a training sequence wherein, a trainings sequence of said first signal and a data sequence of said second signal are arranged to be simultaneously transmitted.

10. (*New*) Simultaneous signals for transmission by an apparatus as claimed in claim 3,  
said simultaneous signals comprising at least a first signal and a second signal,  
said first signal and said second signal comprising a data sequence and a training sequence wherein, a trainings sequence of said first signal and a data sequence of said second signal are arranged to be simultaneously transmitted.

11. (*New*) Simultaneous signals for transmission by an apparatus as claimed in claim 4,  
said simultaneous signals comprising at least a first signal and a second signal,  
said first signal and said second signal comprising a data sequence and a training sequence wherein, a trainings sequence of said first signal and a data sequence of said second signal are arranged to be simultaneously transmitted.

12. (*New*) Simultaneous signals for transmission by an apparatus as claimed in claim 5,  
said simultaneous signals comprising at least a first signal and a second signal,  
said first signal and said second signal comprising a data sequence and a training sequence wherein, a trainings sequence of said first signal and a data sequence of said second signal are arranged to be simultaneously transmitted.

13. *(New)* Simultaneous signals for transmission by an apparatus as claimed in claim 6,  
said simultaneous signals comprising at least a first signal and a second signal,  
said first signal and said second signal comprising a data sequence and a training  
sequence wherein, a trainings sequence of said first signal and a data sequence of said  
second signal are arranged to be simultaneously transmitted.